

in the modified chord, in accordance with Part 8 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1166, Revision 2, dated May 25, 2006. If any crack is found, before further flight, repair in accordance with Part 3 or Part 4, as applicable, of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1166, Revision 2, dated May 25, 2006; except, if the repairs cannot be installed using the identified procedures, repair before further flight using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

**(j) Follow-On Inspection for Interim Modification and Repair**

For airplanes having line numbers 1 through 3132 inclusive, on which an interim modification of the BS 727 outboard chord as defined in Part 6 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1166, Revision 2, dated May 25, 2006, has been accomplished: Within 60,000 flight cycles after accomplishment of the interim modification of the outboard chord of the frame at BS 727 at S-18A, but no earlier than 50,000 flight cycles after accomplishment of the modification, do a one-time follow-on open-hole eddy current inspection to detect cracks in the modified chord, in accordance with Part 8 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1166, Revision 2, dated May 25, 2006. If any crack is found during the inspection required by this paragraph, before further flight, repair in accordance with Part 3 or Part 4, as applicable, of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1166, Revision 2, dated May 25, 2006; except, where the repairs cannot be installed using the procedures identified in this service bulletin, repair before further flight using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

**(k) Exception to the Service Information**

Access and restoration procedures specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1166, Revision 2, dated May 25, 2006, are not required by this AD. Operators may do those actions following their approved maintenance procedures.

**(l) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (m)(1) of this AD. Information may be emailed to: [9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto:9-ANM-Seattle-ACO-AMOC-Requests@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

**(m) Related Information**

(1) For more information about this AD, contact Alan Pohl, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: (425) 917-6450; fax: (425) 917-6590; email: [alan.pohl@faa.gov](mailto:alan.pohl@faa.gov).

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740; telephone 562-797-1717; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on June 22, 2017.

**John P. Piccola, Jr.,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

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**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-0627; Directorate Identifier 2017-NM-037-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all Airbus Model A330-200 Freighter, -200, and -300 series airplanes; and Airbus Model A340-200, -300, -500, and -600 series airplanes. This proposed AD was prompted by a report that the trimmable horizontal stabilizer actuator (THSA) might not function as intended after failure of the primary load path. This proposed AD would require repetitive detailed visual inspections for discrepancies of the

THSA upper attachments and no-back housing. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by August 14, 2017.

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *Fax:* 202-493-2251.

- *Mail:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- *Hand Delivery:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus SAS, Airworthiness Office—EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

**Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0627; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments

to an address listed under the **ADDRESSES** section. Include “Docket No. FAA–2017–0627; Directorate Identifier 2017–NM–037–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2017–0044, dated March 9, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus Model A330–200 Freighter, –200 and –300 series airplanes; and Airbus Model A340–200, –300, –500, and –600 series airplanes. The MCAI states:

The Trimmable Horizontal Stabilizer Actuator (THSA), as installed on A330 and A340 aeroplanes, was initially designed to stall when engaging on the upper secondary load path (SLP) after primary load path (PLP) failure. Such stall triggers system monitoring detection. New mission profile analysis revealed that in some cases, the THSA could be operated while engaged on the upper SLP

without stalling [*i.e.*, the THSA might not function as intended after failure of the primary load path]. The partial engagement of the SLP at upper attachment level does not trigger any indication to the flight crew.

This condition, if not detected and corrected, could lead to THSA upper attachment failure and consequent disconnection of the THSA from the aeroplane structure, possibly resulting in loss of control of the aeroplane.

For the reasons described above, this [EASA] AD requires repetitive detailed [visual] inspections (DET) of the upper THSA attachments parts and the PLP and SLP fuselage attachment points, and, depending on findings (which include, but are not limited to, failure of the primary load path), accomplishment of applicable [additional inspections for discrepancies and] corrective action(s).

The additional inspections include a detailed visual inspection for discrepancies of the upper attachment fitting of the airplane and a detailed visual inspection for discrepancies of the removed THSA. Corrective actions include repair and replacement of the THSA. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA–2017–0627.

**Related Service Information Under 1 CFR Part 51**

We reviewed the following Airbus service information:

- Airbus Service Bulletin A330–27–3218, Revision 01, dated December 5, 2016.
- Airbus Service Bulletin A340–27–4203, Revision 01 dated December 5, 2016.

- Airbus Service Bulletin A340–27–5067, Revision 01 dated December 5, 2016.

The service information describes procedures for detailed visual inspections for discrepancies of the THSA upper attachments and no-back housing, additional inspections for discrepancies, and corrective actions. These documents are distinct since they apply to different airplane models. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

**FAA’s Determination and Requirements of This Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of these same type designs.

**Costs of Compliance**

We estimate that this proposed AD affects 102 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

**ESTIMATED COSTS**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection .....	3 work-hours × \$85 per hour = \$255 per inspection cycle.	\$0	\$255 per inspection cycle	\$26,010

We estimate the following costs to do any necessary replacements that would

be required based on the results of the proposed inspection. We have no way of

determining the number of aircraft that might need this replacement.

**ON-CONDITION COSTS**

Action	Labor cost	Parts cost	Cost per product
Replacement .....	20 work-hours × \$85 per hour = \$1,700 .....	\$734,661	\$736,361

We have received no definitive data that would enable us to provide cost estimates for other on-condition actions specified in this proposed AD.

**Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII:

Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that

section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

**Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- 1. Is not a “significant regulatory action” under Executive Order 12866;
- 2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

**PART 39—AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Airbus:** Docket No. FAA-2017-0627; Directorate Identifier 2017-NM-037-AD.

**(a) Comments Due Date**

We must receive comments by August 14, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342 and -343 airplanes; and Airbus Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes; certificated in any category, all manufacturer’s serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 27, Flight Controls.

**(e) Reason**

This AD was prompted by a report that the trimmable horizontal stabilizer actuator (THSA) might not function as intended after

failure of the primary load path. We are issuing this AD to detect and correct discrepancies of the THSA upper attachments and no-back housing, which could lead to THSA upper attachment failure and consequent disconnection of the THSA from the airplane structure, possibly resulting in loss of control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Repetitive Detailed Visual Inspections**

Before exceeding the Threshold in Table 1 to paragraph (g) of this AD, as applicable, or within 3 months after the effective date of this AD, whichever occurs later; and thereafter at intervals not to exceed the inspection interval values defined in Table 1 to paragraph (g) of this AD; accomplish a detailed visual inspection for discrepancies of the trimmable horizontal stabilizer actuator (THSA) upper attachments and no-back housing, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3218, Revision 01, A340-27-4203, Revision 01, or A340-27-5067, Revision 01, all dated December 5, 2016, as applicable. Where the “Threshold” column of table 1 to paragraph (g) of this AD specifies compliance times in “FH” (flight hours) or “FC” (flight cycles), those compliance times are flight hours or flight cycles since the first flight of the airplane, or since the last accomplishment of Airbus Model A330 or A340 Maintenance Review Board Report task 27.40.00/07, or since the last detailed visual inspection of the THSA done in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3218, A340-27-4203, or A340-27-5067, all dated July 1, 2016, as applicable.

TABLE 1 TO PARAGRAPH (g) OF THIS AD—THSA UPPER ATTACHMENTS/NO-BACK HOUSING INSPECTIONS

Affected airplanes	Compliance times (whichever occurs first, flight hours (FH) or flight cycles (FC))	
	Threshold	Inspection interval (not to exceed)
A330, A340-200 and A340-300 .....	Before 4,000 FH or 1,000 FC .....	4,000 FH or 1,000 FC.
A340-500 and A340-600 .....	Before 4,000 FH or 800 FC .....	4,000 FH or 800 FC.

**(h) Additional Inspections and Corrective Actions**

(1) If, during any inspection required by paragraph (g) of this AD, any discrepancy identified in the Accomplishment Instructions of Airbus Service Bulletin A330-27-3218, Revision 01, A340-27-4203, Revision 01, or A340-27-5067, Revision 01, all dated December 5, 2016, as applicable, is detected, before further flight, remove the THSA, and accomplish a detailed visual inspection for discrepancies of the upper attachment fitting of the airplane and a detailed visual inspection for discrepancies of the removed THSA, in accordance with the Accomplishment Instructions of Airbus

Service Bulletin A330-27-3218, Revision 01, A340-27-4203, Revision 01, or A340-27-5067, Revision 01, all dated December 5, 2016, as applicable. As an alternative to the removed THSA inspections required by this paragraph, before further flight, replace the THSA with a serviceable part (as defined in paragraph (i) of this AD).

(2) If, during any inspection of the upper attachment fitting of the airplane required by paragraph (h)(1) of this AD, any discrepancy identified in the Accomplishment Instructions of Airbus Service Bulletin A330-27-3218, Revision 01, A340-27-4203, Revision 01, or A340-27-5067, Revision 01, all dated December 5, 2016, as applicable, is

detected, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (k)(2) of this AD.

(3) If, during any inspection of the removed THSA required by paragraph (h)(1) of this AD, no discrepancy specified in the Accomplishment Instructions of Airbus Service Bulletin A330-27-3218, Revision 01, A340-27-4203, Revision 01, or A340-27-5067, Revision 01, all dated December 5, 2016, as applicable, is detected, before further flight, reinstall the THSA, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3218, Revision 01, A340-27-4203,

Revision 01, or A340-27-5067, Revision 01, all dated December 5, 2016, as applicable.

(4) If, during any inspection of the removed THSA required by paragraph (h)(1) of this AD, any discrepancy specified in the Accomplishment Instructions of Airbus Service Bulletin A330-27-3218, Revision 01, A340-27-4203, Revision 01, or A340-27-5067, Revision 01, all dated December 5, 2016, as applicable, is detected, before further flight, replace the THSA with a serviceable part (as defined in paragraph (i) of this AD), in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3218, Revision 01, A340-27-4203, Revision 01, or A340-27-5067, Revision 01, all dated December 5, 2016, as applicable.

#### (i) Definition of Serviceable THSA

For the purpose of this AD, a serviceable THSA is a part that has accumulated less than 4,000 FH or 1,000 FC (for Airbus Model A330, A340-200, or A340-300 airplanes) or 4,000 FH or 800 FC (for Airbus Model A340-500 or A340-600 airplanes), whichever occurs first since the first flight of the airplane, or since the last overhaul of the THSA, or since the last detailed visual inspection of the THSA in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3218, Revision 01, A340-27-4203, Revision 01, or A340-27-5067, Revision 01, all dated December 5, 2016, as applicable.

#### (j) Credit for Previous Actions

This paragraph provides credit for actions required by paragraphs (g), (h)(1), (h)(3), and (h)(4) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraph (j)(1), (j)(2), or (j)(3) of this AD.

(1) Airbus Service Bulletin A330-27-3218, Revision 00, dated July 1, 2016.

(2) Airbus Service Bulletin A340-27-4203, Revision 00, dated July 1, 2016.

(3) Airbus Service Bulletin A340-27-5067, Revision 00, dated July 1, 2016.

#### (k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Branch, send it to attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: [9-ANM-116-AMOC-REQUESTS@faa.gov](mailto:9-ANM-116-AMOC-REQUESTS@faa.gov). Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved

by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: Except as required by paragraph (h)(2) of this AD: If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

#### (l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2017-044, dated March 9, 2017, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0627.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office-EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on June 22, 2017.

**John P. Piccola, Jr.,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

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**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 417

#### Waiver of Flight Termination Receiver Qualification by Similarity Deficiencies

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Notice of waiver.

**SUMMARY:** This notice concerns three petitions for waiver submitted to the FAA by Rocket Lab USA Inc. (RL) for the Flight Termination Receiver (FTR) Qualification by Similarity (QBS): A petition to waive the requirement that a component may be qualified based on similarity to a component that has already been qualified for use only if the environments encountered by the previously qualified component during its qualification or flight history were equal or more severe than the Rocket Lab qualification environments; a petition to waive the Electromagnetic Interference and Compatibility (EMI/EMC) on the same units; and a petition to waive the requirement that the same manufacturer must produce the qualified and the unqualified component in the same location using identical tools and manufacturing processes. The FAA grants these three petitions.

**DATES:** Issued in Washington, DC, on May 15, 2017.

**FOR FURTHER INFORMATION CONTACT:** For technical questions concerning this waiver, contact Michael Wiktowy, Licensing Program Lead, Commercial Space Transportation—Licensing and Evaluation Division, 800 Independence Avenue SW., Washington, DC 20591; telephone: (202) 267-7287; email: [Michael.Wiktowy@faa.gov](mailto:Michael.Wiktowy@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Background

RL submitted a petition to the FAA's Office of Commercial Space Transportation (AST) requesting relief from regulatory requirements for a launch license for flight of Electron test flight missions from Mahia, New Zealand. Specifically, RL requested relief from 14 CFR E417.7(f)(2) and (5), Qualification Testing and Analysis by Similarity for the Flight Termination Receiver. For Qualification, the Flight Termination Receiver is required to meet Table E417.19-2, which states with note (5): "The same three sample components must undergo each test designated with an X. For a test designated with a quantity of less than three, each sample component tested must be one of the original three sample components." For Qualification Testing and Analysis by Similarity, Part 417 Appendix E section 417.7(f) provides the requirements a launch operator must satisfy in order to qualify or re-qualify a flight termination system component's design through qualification by similarity to tests performed on identical or similar hardware. Section E417.7(f)(2) states that to qualify component "A" based on similarity to